

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004438**Date Inspected:** 20-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower & OBG**Summary of Items Observed:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Bay 2:

The QA Inspector randomly observed that no contract work was being performed in this bay.

OBG Bay 3:

The QA Inspector randomly observed ZPMC welders Jia An Quan ID 211175, Sun Zuo Wen ID 048920 and Zhao Shu Ming ID 046819 utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2F (Horizontal Fillet) Position with ZPMC Weld Procedure Specification (WPS) WPS-B-P-2112 to tack weld T-Ribs to Side Plate SP613-001 at Weld Joint (WJ) Numbers 015 through 018. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Chen Ding Ding ID 048923, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2F (Horizontal Fillet) Position with ZPMC Weld Procedure Specification (WPS) WPS-B-P-2112 to tack weld T-Ribs to Side Plate SP764-001 at Weld Joint (WJ) Numbers 007 through 010. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai monitoring weld

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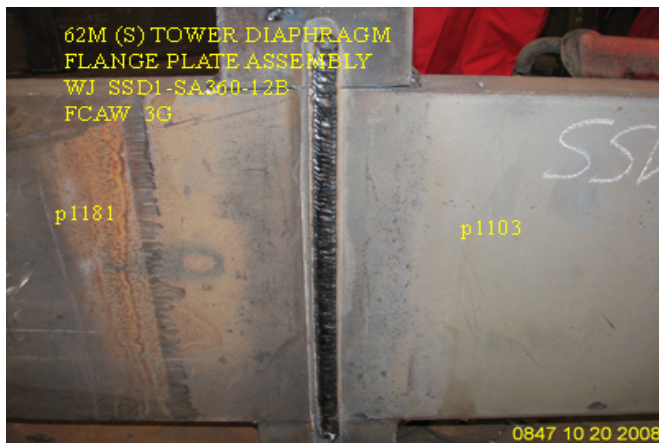
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parameters. The weld parameters appeared to comply with contract requirements.

OBG Bay 4:

The QA Inspector randomly observed ZPMC welder Li Xue Hua ID 058174, utilizing the Flux Cored Arc Welding (FCAW) Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-T-2233-B-U3-F to weld the butt splice at WJ SSD1-SA360-12B on 62M (S) Tower Diaphragm Flange Plate Assembly SA352. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Zhao Chen Sun monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 211 amps, 25.2 volts with a travel speed of 117 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welders Han Hong Wen ID 200149 (WJ 11A) and Li Meng Qian ID 045460 (WJ 8B, utilizing the FCAW Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-T-2233-B-U3-F to weld the butt splice at WJ ESD1-SA409-11A on 59M (E) Tower Diaphragm Flange Plate Assembly. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Zhao Chen Sun monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 211 amps, 25.2 volts with a travel speed of 117 mm per minute. The weld parameters appeared to comply with contract requirements.



### Summary of Conversations:

As noted in the above body of this report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, 13764710411, who represents the Office of Structural Materials for your project.

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**Inspected By:** Franco,Charlie

Quality Assurance Inspector

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**Reviewed By:** Wright,Mark

QA Reviewer